TASMANIA

GOVERNMENT
PRICES
OVERSIGHT
COMMISSION

Metro Fares Investigation

Draft Report

December 1996

Summary

The Government Prices Oversight Commission has been requested to conduct an investigation of the pricing policies of the Metropolitan Transport Trust (MTT or Metro). The Commission is to produce a Final Report by 28 February 1997 in which it will make recommendations on the maximum prices to be charged by the MTT for bus services for the next three years.

This Draft Report includes an analysis of possible future fare options. It is being released for comment prior to completion of the Final Report and recommendations.

The Terms of Reference for the investigation require the Commission to take into account the implications of the broader National Competition Policy (NCP) reform agenda for the pricing policies of the MTT, and the Government's response (if any) to the Report of the Committee of Review on Public Vehicle Licensing in Tasmania.

The purpose of the NCP is to establish a set of principles for structural reform and prices oversight of Government monopolies and to promote competition in the interests of efficiency and economic growth while dealing with social objectives.

The draft report of the Burton committee suggests regulatory changes that would permit Metro to compete with other operators to provide non-urban transport and, if the Government decides to introduce a competitive framework for these activities, for other operators to compete with Metro to provide urban public transport services. The Government has not responded to the Burton report to date. In preparing the Draft Report the Commission has assumed that Metro will continue to provide services in the current setting.

The Ministerial Charter requires the MTT to provide an integrated system of public transport

for all sections of the community to all major centres in Hobart, Launceston and Burnie. It also requires a high quality transport service consistent with demand and maximum cost efficiency.

The levels of service that Metro can provide depends in large measure on the funds it receives from Government. In future, the non-commercial services that the Government requires Metro to provide will be specifically identified and funded. The process for identifying and costing these “community service obligations” (CSOs) has commenced, but is not likely to be completed before the Commission submits its Final Report.

The CSO process provides an opportunity for Government to specify its requirement for services. Some submissions expressed concern that there had not been sufficient community discussion on the definition and level of community services and that these requirements need to be specified before the Commission can complete its task. This Draft Report is based on the current levels of service, as required by the Terms of Reference.

Patronage, measured as first boardings, has declined slightly over the five years to 30 June 1996. While student numbers have remained relatively stable, the number of first boardings of full fare paying passengers has decreased by some 22 per cent, matched by an increase in concession travellers. Adult and concession travellers each represent about one quarter of Metro travellers, with students comprising the other half.

Metro fares were increased on 21 July 1996, the second increase in five years. Adult fares rank about the middle of the range of fares for other capital cities.

Submissions

Thirty-six submissions were received in response to the Background Paper released in October 1996. There was a strong focus on Metro services with a number expressing concern about the impact of the September 1996 service reductions on student and

youth evening bus users, on daytime elderly users and on workers travelling outside peak periods.

A number of submissions also included suggestions for service improvements including park and ride facilities, inter-regional routes and mini-bus services.

Most respondents commenting on fares consider that fare levels are currently too high, making it more economical to use a car for family travel. Some considered that current fare levels are acceptable and could even be increased by a small amount. The Northern Metro Advisory Group considered that a fare increase soon after the July 1996 increase could cause further loss in patronage.

Many submissions referred to the inter-relationship of Metro services and other urban transport issues. Some consider that urban public transport should be subsidised as car users do not ‘pay their way’ — a view not supported by the Commission’s research.

The Metro submission to the Investigation noted that convenience, price and comfort are the main factors influencing transport choice. The submission stressed that Metro costs are the lowest of Australian publicly owned bus operators, and current legislation restricts the MTT from achieving private sector levels of costs. The level of fares must enable Metro to achieve the financial performance Government expects of its business enterprises. Government CSO, rate of return and asset valuation policies are critical to meeting these requirements. Metro recommends that the current distance-based sectional fare structure and, at least in the short term, existing fare types be maintained.

MTT Finances

Government funding of $20.7 million in 1995-96 represents about two-thirds of Metro revenues, the balance obtained from $7.9 million in fare receipts and $2.5 million in other revenue. A high

proportion of Government funding for urban public transport is not unusual.

Metro operating expenses are predominantly (59 per cent) related to payroll and on-costs. Metro operating cost per kilometre has fallen in real terms by 11 per cent since 1992-93.

Major assets of the MTT are its bus fleet, land and buildings and an investment portfolio, part of the MTT provision for employee entitlements. Bus purchases (new buses and purchases on expiry of operating leases) for 1994-95 and 1995-96 were financed largely from investments.

The future financial performance of the MTT will depend much more on the level of Government contributions than on fare revenues. The major financial commitments during the period to 30 June 2000 are expected to be related to purchases of buses on the expiry of operating leases. No new buses are likely to be purchased during this period, but the following years will require expenditure of more than $5 million per annum to maintain the average age of the bus fleet.

Benchmark Costs

The Commission has taken note of reforms in other States in providing urban bus services. In Melbourne, Adelaide and Perth portions of the route network have been offered for tender by public and private operators. Although the Government has not to date responded to the structural changes suggested by the Burton committee, the Commission has estimated benchmark costs on the basis of outcomes that could arise from Metro operations in a competitive environment. It recognises that achievement of those benchmark levels of costs would require substantial change in Metro’s business environment and in the terms and conditions of Metro employees.

An annual survey of public and private urban bus operators shows that for Metro’s 1994-95 costs of operation were the lowest of the public operators,

but significantly above the average of private operators. Since the time of the survey, Metro has achieved significant cost savings in real terms. The Metro 1996-97 budget reflects significant labour productivity gains and anticipates a reduction of average operating costs of approximately 7 per cent in real terms from 1994-95 levels. Benchmark operating costs are some 92 per cent of Metro 1996-97 budget costs, ie costs could be reduced by a further 8 per cent in a competitive environment.

The capital charges included in the 1996-97 Metro budget are made up of depreciation expenses and interest charges. For benchmark purposes, the Commission has estimated the depreciation and ownership charges on an optimised set of assets. The average age of Metro bus fleet is the youngest (5.4 years) of the public and private operators included in the survey (8.6 years). The Commission has estimated depreciation and ownership costs associated with a ‘benchmark’ fleet of an age comparable with the industry. Ownership charges have been estimated on the basis of an 8 per cent real pre-tax return on funds invested in assets, this rate representing a commercial return in a low risk business environment.

In aggregate, benchmark costs are approximately equal to the Metro 1996-97 budget. Lower benchmark operating costs are offset by higher ownership charges associated with a commercial return on assets. The Metro submission states that a target reduction of costs of 20 per cent (from 1994-95 to 1999-2000) has been adopted. Some of the cost savings are expected to arise from an ageing bus fleet and lower depreciation charges, but details of potential cost savings were not provided in the submission.

Services and Needs

Metro operates weekday services in Hobart, Launceston and Burnie, evening services in Hobart and a minor evening service in Launceston, and weekend and public holiday services in Hobart and Launceston.

On 29 September 1996 a number of services were reduced. These changes affected most routes in each city, with the largest reductions on poorly patronised routes. The bulk of the reductions were made to weekend and evening services.

The Commission has examined the costs and patronage of Metro services by time period and by centre. Cost recovery (the proportion of costs that is recovered from fare revenue alone) is highest in the interpeak period (41 to 53 per cent), and lowest for evening and weekend services (23 to 31 per cent, public holidays excluded). Peak period cost recovery ranges from 27 to 35 per cent.

Metro has proposed a number of initiatives to increase patronage by better matching of services and needs. These include extension of high frequency midi bus services, and examining the potential for park and ride, hail and ride and demand responsive services.

Most (60 to 80 per cent) of Metro patrons travel in the peak periods, defined as before 9 am and between 2.45 pm and 6 pm weekdays. Students and children are the predominant class of traveller in all time periods.

Based on data from the 1991 Census, buses were used for 9 per cent of Hobart travel to work with much lower proportions in Launceston and Burnie. More than 18 per cent of work travel to the Hobart CBD was by bus. Suburbs with above average bus use are located on Hobart’s eastern shore and generally have a high proportion of public housing. Bus use is more common for low income workers.

Pricing Principles

The principles that need to be considered in pricing decisions include the costs of service provision, the factors that affect demand, the transport alternatives available for bus users and the practicalities of fare structures and fare collection.

In the Background Paper the Commission stated ‘Fares should equal (or at least reflect) the costs of

service provision so that resources are allocated efficiently between competing uses of government and private funds.' This principle requires that prices be set equal to the cost of the last (marginal) user of a service. These costs vary by time of day according to penalty rates payable to drivers and to the marginal cost of providing additional buses for extra services. Peak costs are two to three times higher than interpeak costs when expressed as a cost per kilometre. On a cost per passenger basis, which is the preferable basis for fare setting, interpeak costs are 50 to 70 per cent of peak costs.

Service costs also increase with distance. The current Metro fares are distance-based, but do not fully reflect the additional costs of providing longer route services.

There is an economic case to set public transport fares below costs if the prices of competing transport modes are below costs. Some submissions argued that car users do not pay for the externalities of congestion, pollution and road accidents associated with car use.

Few studies have measured the reduction in public transport fares that may be justified because motorists do not pay the full social cost of individual journeys. Drawing on one recognised model, the estimated reduction of fares justified by avoided congestion for a city the size of Hobart is 15 to 30 per cent of the marginal cost. The current fares are well below 70 per cent of the marginal cost.

The level of fare affects the level of demand for bus services. In broad terms, commuter travellers are less sensitive to price than other travellers. The Commission has adopted estimates of price elasticity of -0.3 for adult peak travellers, -0.3 for student travellers and -0.4 to -0.5 for others. This means that for a 10 per cent increase in fare, in the long term 3 per cent (or 5 per cent) of bus travellers could cease to use the service.

It is unlikely that lower Metro fares would affect the demand for car travel to any appreciable extent

or that lower than current fares can be justified by reductions in the externalities of car use. Bus patronage is more responsive to changes in frequency of service than it is to price. If the evidence from empirical studies holds for Tasmania, there may be higher benefits from targeted increases in service levels than in maintaining current levels of fares.

Fare Options

Metro fares are currently section-based, but with a weak relationship between number of sections and distance travelled. The Commission considers that a section-based system should be retained only if fares for longer distance trips are increased relative to shorter distance trips. A zone system has the advantage of simplicity for passengers and drivers, and may be appropriate to consider when Metro replaces ticketing equipment around the year 2000.

On the basis of the pricing principles, there should be a substantial increase in the relative costs of longer distance trips and a differential in fares between peak and off-peak periods. However, the peak and off-peak characteristics in Launceston and Burnie are less marked than those in Hobart, and an average fare for all periods seems more appropriate for the smaller cities.

The feasible fare options developed by the Commission all have prices below costs. In one option, the nexus between price and distance is moderated to take account of the impact of substantial fare increases on patrons in out-lying suburbs.

The concession fare is currently the same amount for all distance travelled. One submission suggested that this concessional flat fare be retained for off-peak travel, but that concessional fares increase with distance in peak periods. The Commission seeks views on this proposal prior to its recommendations in the Final Report.

Estimates of revenues which could be recovered from fare options are based on a one-week sample of patronage from a period following the September 1996 changes in service level. These are preliminary estimates and revenue forecasts will be developed from a larger set of data for the Final Report. The data set suggests that fare revenues of $8.8 million could be expected from the current fare schedule, compared with the Metro 1996-97 budget estimate of $9.0 million. The difference could be due to sample error or to a lower level of patronage than the basis of the budget.

The options considered by the Commission and presented for comment are:

Option 1 - Fares to Recover Costs

This is not a feasible option but is presented for illustration.

- The basic 1 - 2 section fare would need to double to $2.50;
- the 11 - 15 section fare would need more than a three-fold increase to $10;
- the 1 - 2 section off-peak fare would remain at the current $1.20 fare; and
- the 11 - 15 section off-peak fare would double to $5.00.

Fare increases of this level would cause such a loss of patronage that it would not be realistic to maintain current levels of services.

Option 2 - Time and Distance Reflective Fares

This option takes account of time-of-day and distance factors and costs of Metro operations. It is based on:

- an increase in the 1 - 2 section fare to $1.50;

- an increase in the 11 - 15 section fare to $6.00;
- retention of the $1.20 off-peak 1 - 2 section fare
- a small increase in the 11 - 15 section off-peak fare to $3.00 and
- concession fares set at a $1.50 flat fare.

This option would recover fare revenues of $10.2 million per annum, and require Government funding of $18.1 million to meet MTT 1996-97 budget costs.

Option 3 - Modified Cost-Reflective Fare

The distance element of Option 2 is moderated to reduce the impact on longer-distance patrons.

This option retains the peak and off-peak elements for Hobart, but with an average fare struck for Launceston and Burnie as presented in Table 1. The Commission will consider the practicality of a separate fare schedule for these cities before completing its recommendations.

This option is estimated to yield fare revenues of $10.0 million and require a Government contribution of $18.3 million per annum to meet MTT 1996-97 budget costs.

Option 4 - Current Fares plus 10 per cent

This option retains the current relativity of section fares with no time-of-use difference. The average fare increase is approximately 10 per cent. It is illustrated in Table 2 and is estimated to yield fare revenues of $9.3 million, with a Government contribution of $19.0 million necessary to meet MTT 1996-97 budget expenditure.

The revenue effects of these options take account of the potential loss of patronage that could be expected from such fare increases in the long term.

All of these fare options require passengers to pay more for Metro services than they do now. The Government contribution would remain at more than 60 per cent, despite relatively large increases in fares.

The Commission invites comment on matters raised in the report in addition to comments on the fare options prior to completing its recommendations in the Final Report.

Table 1: Illustration of Option 3 'Modified Cost Reflective Fares'

Hobart Fares	Peak Period					Off-Peak Period				
	Trips commencing prior to 9am and between 2.45pm and 6.20pm Monday to Friday					All Other Times				
	Single Trip $	Day Trip $	10 Trip $	10 Day $	Monthly $	Single Trip $	Day Trip $	10 Trip $	10 Day $	Monthly $
ADULT										
Section 1 - 2	1.50		12.00			1.20		9.60		
3 - 4	2.10		16.80			1.60		12.80		
5 - 7	2.70		21.60			1.90		15.20		
8 - 10	3.10		24.80			2.10		16.80		
11 - 15	4.00		32.00			2.80		22.40		
Off-peak multi-trip							3.90		31.00	
ADULT CONCESSION										
All sections	1.50		12.00			1.50		12.00		
Concession off-peak multi-trip							2.40		19.20	
Seniors (all day) multi-trip		2.70		21.60			2.70		21.60	
FAMILY										
Off-peak multi-trip							11.00			
CHILD/SCHOOL STUDENT INCL MATRICULATION COLLEGES										
Under five years of age										
Other than to or from school or day care centre	No Charge					No Charge				
Day care centre group travel per student	0.70					0.70				
Under 16 years of age										
All sections	1.50		12.00		48.00	1.50		12.00		48.00
Child off-peak multi-trip							2.40			
Tertiary Student (Full time students only)										
Section fares	As for Adults		12.50		50.00	As for Adults		12.50		50.00
Tertiary off-peak multi-ride							2.40		19.20	

Launceston and Burnie Fares	All Periods				
	Single Trip $	Day Trip $	10 Trip $	10 Day $	Monthly $
ADULT					
Section 1 - 2	1.40		11.20		
3 - 4	1.90		15.20		
5 - 7	2.30		18.40		
8 - 10	2.60		20.80		
11 - 15	3.40		27.20		
Multi-trip (per Hobart off-peak)		3.90		31.00	
ADULT CONCESSION					
All sections	1.40				
Concession multi-trip (per Hobart off-peak)		2.40		19.20	
Seniors (all day) multi-trip (per Hobart)		2.70		21.60	
FAMILY					
Multi-trip (per Hobart off-peak)		11.00			
CHILD/SCHOOL STUDENT INCL MATRICULATION COLLEGES					
Under five years of age					
Other than to or from school or day care centre	No Charge				
Day care centre group travel per student (per Hobart off-peak)	0.70				
Under 16 years of age					
All sections (per Hobart peak)	1.50				
Child multi-trip (per Hobart off-peak)		2.40			
Tertiary Student (Full time students only)					
Section fares (per Hobart peak)	As for Adults		12.50		50.00
Tertiary multi-ride (per Hobart off-peak)		2.40		19.20	

Table 2: Illustration of Option 4 'Current Fares plus 10 per cent'

All Locations	Peak Period					Off-Peak Period				
	Trips commencing prior to 9am and between 2.45pm and 6.20pm Monday to Friday					All Other Times				
	Single Trip $	Day Trip $	10 Trip $	10 Day $	Monthly $	Single Trip $	Day Trip $	10 Trip $	10 Day $	Monthly $
ADULT										
Section 1 - 2	1.30		10.40			1.30		10.40		
3 - 4	1.80		14.40			1.80		14.40		
5 - 7	2.10		16.80			2.10		16.80		
8 - 10	2.30		18.40			2.30		18.40		
11 - 15	3.10		24.80			3.10		24.80		
Off-peak multi-trip							3.40		26.40	
ADULT CONCESSION										
All sections	1.30		10.40			1.30		10.40		
Concession off-peak multi-trip							2.10		16.70	
Seniors (all day) multi-trip		2.30		20.00			2.30		20.00	
FAMILY										
Off-peak multi-trip							10.00			
CHILD/SCHOOL STUDENT INCL MATRICULATION COLLEGES										
Under five years of age										
Other than to or from school or day care centre	No Charge					No Charge				
Day care centre group travel per student	0.70					0.70				
Under 16 years of age										
All sections	1.30		10.40		42.20	1.30		10.40		42.20
Child off-peak multi-trip							2.10			
Tertiary Student (Full time students only)										
Section fares	As for Adults		11.00		44.00	As for Adults		11.00		44.00